INITIAL STUDY / ENVIRONMENTAL ASSESSMENT AND SECTION 4(F) EVALUATION

BEFORE

AFTER

07-LA-405 K.P.41.0/47.6 (P.M. 25.5/29.6)

Federal Highway Administration

California Department of Transportation

June 2000

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

SCH No. 1999111073
07-LA-405-41.0/47.6 (PM 25.5/29.6)
07223-1178A0 and 1178C0

NEGATIVE DECLARATION (CEQA)

Pursuant to: Division 13, Public Resources Code

Description

The proposed project would widen Interstate 405 (San Diego Freeway) from ten to twelve lanes in order to provide one high occupancy vehicle (HOV) lane in each direction. The project would extend from State Route 90 (Marina Freeway) to Interstate 10 (Santa Monica Freeway), in the Cities of Los Angeles and Culver City, in Los Angeles County, a distance of 6.6 kilometers (4.1 miles). In addition, the northbound Sawtelle off-ramp will be closed and the Culver Boulevard on-ramp will be become an off-ramp. A frontage road will be added adjacent to the southbound side, connecting Sawtelle Boulevard to Braddock Drive west of I-405. The project is being proposed to relieve traffic congestion by encouraging commuters to rideshare, and is one of several such projects being considered for I-405 to provide for a continuous HOV facility.

Construction of the proposed project is expected to require approximately three years. Construction activities would be planned and conducted in such a manner as to reduce traffic delay as much as possible. The construction process would be managed by a traffic control plan. Soundwalls and retaining walls would also be constructed as part of the proposed project.

Determination

An Initial Study has been prepared by the California Department of Transportation (Caltrans). On the basis of this study it is determined that the proposed action will not have a significant effect upon the environment for the following reasons:

1. The project would not substantially affect topography, seismic exposure, erosion, floodplains, wetlands or water quality.

2. The proposed project will not significantly affect natural vegetation, sensitive, endangered or threatened plant or animal species, or agriculture.

3. The proposed project will not significantly affect solid wastes, or the consumption of energy and natural resources.

4. The proposed project will promote improved regional air quality.

5. The proposed project will result in increased noise levels along its route, but with the addition of soundwalls, these effects will be reduced to acceptable levels.

6. The proposed project will not significantly affect land use, public facilities or other socioeconomic features.

7. The proposed project will not significantly affect cultural resources, scenic resources, aesthetics, open space or parklands. Landscaping will be provided to mitigate the loss of existing freeway vegetation.

Original Signed by Ronald Kosinski for Raja Mitwasi *June 19, 2000*

Raja Mitwasi, Deputy Director
California Department of Transportation
District 7

Date

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Note: A vertical line in the margin indicates that changes were made in the text from the Draft Environmental Document (Initial Study / Environmental Assessment) to the Final Environmental Document (Negative Declaration / Finding of No Significant Impact).

2. Description of the Proposed Project

2.1 Introduction

This section describes the alternatives considered for this proposed project. It describes the following alternatives: No-Build (Alternative 1), the Minimum Width HOV Facility (Alternative 2), the Ultimate Width HOV Facility (Alternative 3a), the Ultimate Width HOV Facility with Ramp Consolidation Alternative (Alternative 3b), and Ultimate Width HOV Facility with Ramp Consolidation II (Modified Alternative 3ab). Based on the descriptions of the relevant resources in Section 3 and the predicted effects of alternatives in Section 4, this section presents the effects of all alternatives in comparative form, providing a clear basis for choice among the options presented. High occupancy vehicles are defined for this project as vehicles with two or more persons.

2.2 Existing Facility and Scope of Project

The segment of the San Diego Freeway in the proposed project area was originally constructed between 1957 and 1968 as an eight lane facility consisting of 3.66 meter (12 feet) lanes, 3.05 meter (10 feet) outside shoulders, and a 6.71 meter (22 feet) median between SR-90 and I-10. The existing lane widths were reduced to 3.35 meters (11 feet) and the median was used to accommodate the addition of two mixed flow lanes through striping. The other major modifications to this freeway segment have been the construction of soundwalls at various locations and the construction of a concrete barrier in the median.

2.3 Status of Other Proposals in the Project Area

HOV lanes will be constructed along the entire I-405 corridor in Los Angeles County. HOV lanes are currently operating on I-405 from Orange County Line to Interstate 105 (I-105) and from US-101 to I-5. An HOV lane from I-105 to SR-90 is in the design phase and an interim HOV lane, southbound only, from US-101 to Waterford Street is in the construction phase, with anticipated opening date of Spring 2005 and Fall 2001, respectively.

The City of Los Angeles has proposed to widen National Boulevard in the vicinity of I-405.

2.4 Proposed Project Alternatives

Four separate project alternatives are examined in this Initial Study/Environmental Assessment (IS / EA). The alternatives include the following: (1) No-Build, (2) the Minimum Width HOV Facility, (3a) the Ultimate Width HOV Facility, (3b) the Ultimate Width HOV Facility with Ramp Consolidation Alternative, and Modified Alternative 3ab) Ultimate Width HOV Facility with Ramp Consolidation II. Alternatives 2, 3a, 3b, and 3ab propose the addition of two HOV lanes, one in each direction, and will relieve traffic congestion. Additional right-of-way will be required for the build alternatives.

No-Build Alternative (Alternative 1)

This alternative maintains the present lane and shoulder configurations in the project area. The No-Build alternative would do nothing to improve the present and projected congestion and related problems experienced in the project area, thereby leading to a progressive deterioration of LOS. This alternative would lead to an unacceptable LOS (F-3) by the year 2015 for this segment of the freeway. This approach is inconsistent with Caltrans' goal of minimizing congestion and maintaining an efficient and effective interregional mobility system.

Minimum Width HOV Facility (Alternative 2)

The proposed typical half-section will consist of a 1.4 meter (5 feet) half median, a 3.6 meter (12 feet) HOV lane, a 1.2 meter (4 feet) buffer, two 3.3 meter (11 feet) mixed flow lanes, three 3.6 meter (12 feet) mixed flow lanes, and a 3.0 meter (10 feet) outside shoulder. The cost of this alternative was estimated at $83,345,231 in 1995 dollars. This alternative was rejected at the Project Study Report (PSR) stage because it contained numerous non-standard design features.

Ultimate Width HOV Facility (Alternative 3a)

Alternative 3a proposes the addition of two HOV lanes, one lane in each direction. The proposed typical half-section will consist of a 3.7 meter (12 feet) half median, a 3.6 meter (12 feet) HOV lane, a 1.2 meter (4 feet) buffer, five 3.6 meter (12 feet) mixed flow lanes, and a 3.0 meter (9.8 feet) outside shoulder. Layouts for this proposal are located in Appendix B, and typical cross sections are located in Appendix E. The cost of this alternative is $96,610,100.

A northbound auxiliary lane will connect the SR-90 connector to the Sawtelle Boulevard exit ramp. A southbound auxiliary lane will stretch from the Braddock Drive entrance ramp to the SR-90 connector exit. Because this alternative widens the freeway, thirteen ramps will be realigned. Each ramp will be metered to ensure a smooth, regulated flow of traffic. Of those thirteen redesigned ramps, eleven will require major modifications. Several bridges carrying local street traffic span I-405 throughout the project limits. Special care was taken in the design process to minimize the disruption of these roadways. Consequently, only one over-crossing (at Palms Boulevard) will have to be replaced completely.

Ultimate Width HOV Facility with Ramp Consolidation (Alternative 3b)

Alternative 3b includes the project as described in Alternative 3a, plus it proposes to consolidate several on- and off-ramps near the I-405 and Culver Boulevard intersection. Grouping the northbound and southbound ramps in this area will permit easier public access to and from the freeway. In addition, the consolidation should reduce the current inefficiency involving merging traffic weaving throughout the region. This alternative will remove three existing freeway ramps. Both the northbound Sawtelle Boulevard off-ramp and on-ramp will be eliminated. To comply with Federal Highway Administration (FHWA) requirements, the southbound Braddock Drive on-ramp will also be removed. Two new freeway ramps will be added: a northbound Culver Boulevard off-ramp and a southbound Sawtelle Boulevard on-ramp. Lastly, long auxiliary lanes will link the planned new northbound Culver Boulevard off-ramp to the I-405 / SR-90 interchange and the southbound Culver Boulevard on-ramp to

the same interchange. Due to height constraints, construction of a new over-crossing will be required at Palms Boulevard. The cost of this alternative is $ 97,728,800.

Regarding the mainline I-405 traffic operations, circulatory improvements will come about from consolidating the entering and exiting vehicles into two prime locations, thereby eliminating the operational inefficiencies associated with weaving vehicles.

Most of the layout sheets are the same as in Alternative 3a, however, those that differ can be found in Appendix C. This alternative contains the same cross-sectional features as described for Alternative 3a (Appendix E).

Some reconfiguration of Culver Boulevard is needed to accommodate traffic on Culver Boulevard. This reconfiguration will temporarily impact a Section 4(f) resource, a bike path and pedestrian walkway (See Chapter 10). A letter of concurrence for impacts to Section 4(f) resources was received from the Department of the Interior on January 18, 2000 (Appendix H).

Ultimate Width HOV Facility with Ramp Consolidation II (Modified Alternative 3ab)

Modified Alternative 3ab is a refinement of previous alternatives in response to the public comment period. Modified Alternative 3ab shares the project descriptions from Alternative 3b with some changes. Continuing to ease public access to and from the freeway, this alternative will remove the northbound on- and off-ramps along Sawtelle Boulevard, while retaining the proposed northbound off-ramp to Culver Boulevard. Due to geometric constraints along Sawtelle Boulevard, close proximity to the intersection of Culver Boulevard and Sawtelle Boulevard, as well as having a short turning radius and a steep slope, the southbound on-ramp from Sawtelle Boulevard is not being considered with this alternative. Rather, the southbound on-ramp from Braddock Drive will remain with the addition of a frontage (service) road spanning from Sawtelle Boulevard to Braddock Drive. The frontage (service) road will help link motorists from Culver Boulevard to the southbound I-Route 405 Freeway. This alternative will continue to replace the Palms Boulevard over-crossing and as well as reconfigure Culver Boulevard. The cost of this alternative is $96,700,000.

Eliminating the isolated on- and off- ramps along Sawtelle Boulevard and replacing them with a direct off- ramp to Culver Boulevard will help improve traffic operations along the northbound mainline direction, as weaving movements will be decreased. The southbound traffic operations will not be negatively disturbed as the existing southbound on- and off-ramp configuration will remain in its existing format. Despite the increased traffic volumes anticipated for the year 2025, a traffic/ramp analysis indicates that some intersections will operate a better LOS, if not the same as the current LOS (Table 6).

This modified alternative shares the same layout sheets with Alternative 3a and 3b except for those sheets found in Appendix D. This alternative also contains the same cross-sectional features as described for Alternatives 3a and 3b (Appendix E).

Table 6 – Existing and Projected LOS for Local City Streets

Location	Existing (Year 2000)		Alt. 3a (Year 2025)		Alt. 3ab (Year 2025)	
	AM	PM	AM	PM	AM	PM
Sawtelle Boulevard / Culver Boulevard	D	D	E	F	F	F
Braddock Drive / Sawtelle Boulevard	F	F	F	F	E	F
Culver Boulevard / Northbound 405 on- and off-ramp	E	A	F	A	F	F
Braddock Drive / Southbound 405 on-ramp	D	C	E	E	A	A

Issues Common to the Build Alternatives (Alternatives 3a, 3b, and 3ab)

The design of the proposed project conforms to the most current set of Caltrans' comprehensive design criteria. The only non-standard design features occur in the transition areas that link this segment with the neighboring sections. These transition regions are the I-405 / SR-90 interchange and the I-405 / I-10 interchange.

Stretching throughout the site, soundwalls will border virtually all the ramps and the shoulders of the mainline freeway. Every effort will be made to minimize soil erosion during construction. A thorough landscaping plan will beautify the surrounding Right-of-Way such that the new freeway addition will blend in with the existing terrain.

To ensure that the vehicles in the HOV lanes will move easily with minimal disruption, a California Highway Patrol enforcement area will be provided from north of SR-187 to north of the Westwood Channel. The useable left shoulder width is 3.4 m (11 feet); however, by relocating the median barrier, a 4.8 meter (16 feet) wide enforcement area is easily created with ample shoulder width on the opposite side of the freeway.

The project will connect at the southern end at the SR-90 interchange to a proposed HOV project (EA 199851 - HOV lanes from I-105 to SR-90). This southerly neighboring project is a re-striping HOV project with 3.35 meter (11 feet) lanes, a 0.3 meter (1 feet) buffer, and a reduced shoulder. After the SR-90 / I-405 separation, the lanes will transition out to the proposed typical section of this project.

An ingress / egress will be striped south of the SR-90 / I-405 separation to facilitate access to LAX. In order to achieve access to and from both interchanges, additional ingress / egress locations will be provided north of the SR-90 interchange and south of the I-10 interchange.

The existing northbound I-405 exit to I-10 is currently a one and a half lane exit. Shortly after the I-10 turnoff, the number of northbound lanes drops from four lanes to three lanes. To keep four mixed flow lanes running throughout the intersection, the northbound HOV lane will terminate at approximately 180 meters (591 feet) south of the National Boulevard off-ramp and become a mixed flow lane. Furthermore, this project proposes to drop the existing number four lane at the exit to I-10, thereby making it a two lane forced exit instead of the optional exit and then dropping the lane shortly thereafter. The exit ramp will be modified due to the widening required for the HOV lane. When the westbound I-10 ramp connects with northbound I-405, two I-405 traffic lanes will be regained.

Existing northbound auxiliary lanes are located at the following locations:

- Sawtelle Boulevard entrance ramp has a 120 meter (394 feet) acceleration lane
- Culver Boulevard entrance ramp has a 150 meter (492 feet) acceleration lane
- Venice Boulevard entrance ramp has a 150 meter (492 feet) acceleration lane
- One kilometer (0.62 mile) before I-10 exit ramp to I-10 exit ramp

Northbound auxiliary lanes are proposed at the following locations:

- 1.7 kilometer (1 mile) before I-10 exit ramp to I-10 exit ramp
- Culver Boulevard entrance ramp to Venice Boulevard exit ramp
- Venice Boulevard entrance ramp 590 meter (1,930 feet) acceleration lane
- SR-90 west to I-405 north connector to Culver Boulevard off-ramp

Existing southbound auxiliary lanes are located at the following locations:

- Venice Boulevard entrance ramp has 120 meter (394 feet) acceleration lane

Southbound auxiliary lanes are proposed at the following locations:

- Venice Boulevard entrance ramp to Culver Boulevard exit ramp
- National Boulevard entrance ramp 215 meter (710 feet) acceleration lane
- From 76 meter (250 feet) south of Palms Boulevard to Venice Boulevard exit ramp
- From Braddock Drive to SR-90 exit ramp

Currently, the number of vehicles with two or more occupants is 1,600 in the northbound direction during the PM peak hours. If the HOV lanes were opened in 1995, there would be a LOS of C. By the time this project is constructed, the HOV lanes may open with a LOS of D during peak hours.

Future Plans for Project Area

The build alternatives (Alternatives 3a, 3b, and 3ab) could accommodate a future elevated transit way in the median, similar to the Interstate 110 (I-110) transit way. An alternative striping plan would be utilized if a future elevated rail and/or HOV system is installed.

Identification of the Preferred Alternative

The preferred alternative, Modified Alternative 3ab, will replace the on- and off-ramps and decrease weaving along the freeway mainline. Currently, there is only a 0.7 km (0.43 mile) spacing between the off-ramp and the on-ramp. The current Caltrans Highway Design Manual enforces a 1.5 km (0.93 mile) minimal spacing between on- and off-ramps. The non-standard 0.7 km (0.43 mile) distance enhances merges, which contribute to travel time delay, congestion and confusion. Placing an off-ramp leading directly to Culver Boulevard will allow for auxiliary lanes, which help diminish conflicts with weaving and merging as well as contributing to improved traffic flow. The southbound direction will also experience an improvement with this alternative, as there will be five uninterrupted mixed flow lanes within the ramp consolidation limits. In lieu of placing a southbound on-ramp at Culver Boulevard (Alternative 3b), a frontage (service) road will lead motorists to the existing southbound on-ramp at Braddock Drive. Such changes will help ease vehicular movements at various city street intersections bordered along the freeway.

Tremendous inefficiencies exist for motorists trying to exit and return to the freeway. The current ramp configuration is not convenient to access due to its layout. The ramps are located long distances from each other and in odd arrangements, a combination that creates undesirable traffic weaving throughout the entire region. This occurrence worsens as the AADT increases annually. Relocating the ramps into one location will reduce this phenomenon. Moreover, consolidating the ramps will increase the weaving distance between freeway ramps and help traffic flow more efficiently.

Grouping the northbound and southbound ramps at Culver Boulevard permits easier public access to and from the freeway. Under current traffic conditions, the local streets are not able to properly lead Culver Boulevard motorists onto the freeway ramps and vice versa. Entering the freeway in the southbound direction from Culver Boulevard, motorists utilize Sawtelle Boulevard, which creeps beneath the freeway before reaching Braddock Drive, where the southbound on-ramp is located. Leading vehicles to Culver Boulevard from the freeway's northbound direction entails exiting Sawtelle Boulevard and traveling 0.46 km (0.29 miles) before reaching Culver Boulevard.

2.5 Major Investment Study Corridor Analysis

On November 29, 1993, FHWA and the Federal Transit Administration (FTA) issued final guidance on new regulations stemming from the passage of the Intermodal Surface Transportation Efficiency Act. One important requirement of this regulation was the Major Investment Study (MIS), primarily a planning tool to aid decisionmakers with regard to an identified transportation need or problem. However, the onset of the Transportation Equity Act for the 21st Century (TEA-21) in 1998 eliminated the MIS as a stand-alone document and integrated the planning and NEPA provisions. In light of these regulations, Caltrans prepared a Corridor Analysis in coordination with the Metropolitan Planning Organizations such as the Southern California Association of Governments (SCAG), Los Angeles County Metropolitan Transportation Authority (LAMTA), and FTA. The purpose of this Corridor Analysis was to develop and identify viable multi-modal alternatives for the I-405 Corridor. Eight conceptual alternatives were evaluated in this Corridor Analysis: (1) No-build facility, (2) Transportation Systems Management/Transportation Demand Management, (3) At-Grade HOV facility (Alternative 2), (4) At-Grade HOV facility (Alternative 3a or 3b), (5) At-Grade Mixed Flow facility, (6) combination at-grade/elevated facility, (7) Transit/High Speed Rail Alternative, and (8) Truck Lane Alternative. Based on a preliminary analysis of the alternatives, Caltrans recommends the implementation of Alternative 4 [At-Grade HOV facility (Alternative 3a or 3b)]. On August 12, 1999, the *Major Investment Studies Peer Review Committee* at SCAG met and determined that *The Route 405 Corridor Analysis MIS* meets the requirements established by SCAG and FTA / FHWA Guidance. A copy of the "Letter of Completion" dated August 30, 1999 is included in Appendix H.